

REMARKS/ARGUMENTS

This amendment is filed pursuant to a Request for Continued Examination (RCE), which was filed in response to a final office action of November 16, 2010. Claims 1, 7, 10-12 are amended while claim 9 is cancelled. Reconsideration is requested.

I. In the final office action claims 1-7 and 9-12 were rejected under 35 U.S.C. 102(b) as being anticipated by WO 01/39163 ("Lambert"). Applicant respectfully submits that the claims as amended overcome this rejection.

Before discussing the rejection, it would be useful to review Applicant's invention. In Applicant's invention, a circuit (as well as a method) is provided for operating the drivers of a display device. Typically the display device is an LCD display having a plurality of column electrodes and a plurality of row electrode arranged in a matrix organization. Where the column electrode and row electrode intersects, a pixel or display is formed. Each of the column electrodes has a corresponding output channel for driving the associated column electrode. Thus, for n column electrodes, there are n output channels. However, in Applicants' invention, at least one additional output channel is provided. This additional channel is used for calibration, while the display device is in use. The circuit calibrates in the following manner. First, the additional channel is calibrated during one of the row electrode activation periods. Then as a subsequent row electrode is activated, the calibrated output channel is supplied through a switch and connected to a column electrode. The output channel corresponding to that column electrode is then calibrated, while the rest of the output channels are connected to their respective column electrodes. Thereafter, the calibrated corresponding output channel is connected to the corresponding column electrode, and the calibrated output channel is connected to another column electrode through a switch, with the corresponding output channel of that connected column electrode calibrated, and the remainder output channels connected to their corresponding column electrodes. This process repeats until all of the n output channels having corresponding column electrodes are calibrated. From this it can be seen that one of the feature of the present invention is that the additional output channel is not a "spare" or "replacement" output channel. It is used actively along with all of the corresponding output channels.

Turning to Lambert, one sees that the so-called spare column driver 10 shown in Figure 2, which is in the nature of a spare or redundant driver (see page 2, lines 8-17), see page 2, line 33 – page 3, line 4. See also page 5, lines 10-27; see page 10, lines 20-26. Once the spare or redundant driver 10 is used, in place of the “defective” drive, the defective drive is not used any more. In contrast, in the present invention, the additional output channel replaces one of the corresponding output channels having a corresponding column electrode only during a brief time period that the corresponding output channel is calibrated.

In addition, in contrast to Lambert which deals with testing, which involves testing one output channel at a time with the rest of the output channels not used, in Applicant’s invention, during the period of calibration, the device is in use. Thus, the other output channels (the channels not under calibration nor the additional channel) are connected to their respective column electrodes and are in use.

Finally, Lambert discloses that during testing “[I]f the comparator 25 determines that the column driver circuit 23 under test is not defective, the scan operation continues, and the adjacent column driver circuit 12 is tested against the spare column driver circuit 10.” (page 10, lines 22-25). Thus, the column driver circuit are not used in operation but are used to test against the spare column driver circuit.

Therefore, the rejection of claims 1-7 and 9-12 based upon Lambert is not appropriate and should be withdrawn.

III. Claim 8 was rejected based upon Lambert in view of USP 6,600,467 (“Webb”). Applicant respectfully traverses the rejection.

Claim 8 depends upon claim 7, and for the same reasons stated hereto fore, the combination of Lambert and Webb, even if it were obvious to combine, an assumption, not concede, would still not yield the invention as claimed as set forth in claim 7. Therefore, claim 8 is also patentable over Lambert and Webb.

For the foregoing reasons, it is respectfully submitted that the claims are in an allowable form, and action to that end is respectfully requested.

The Commissioner is hereby authorized to charge any fees which may be required, or credit any overpayment, to Deposit Account Number 07-1896, **referencing docket number 348162-982810.**

Respectfully submitted,

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